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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,153

08/11/2006

Martinus Cornelus van den Aker

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600 PEACHTREE STREET, N.E.  
SUITE 5200  
ATLANTA, GA 30308-2216

EXAMINER

MORRISON, THOMAS A

ART UNIT

PAPER NUMBER

3653

NOTIFICATION DATE

DELIVERY MODE

08/19/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/589,153	<b>Applicant(s)</b> VAN DEN AKER, MARTINUS CORNELIUS	
	<b>Examiner</b> THOMAS A. MORRISON	<b>Art Unit</b> 3653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 24-33, 37 and 45--46 is/are pending in the application.  
     4a) Of the above claim(s) 45 and 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-28, 30-33 and 37 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/21/2010 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 24-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,843,365 (Baker) (hereinafter “Baker”) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Baker in view of U.S. Patent No. 6,907,978 (Evans et al.) (hereinafter “Evans”). **See annotated Fig. 1 of Baker below.**

Regarding claim 24, Figs. 1-16b of Baker disclose a method for transporting a sheet, comprising:

moving the sheet (unnumbered sheet in annotated Fig. 1 below) in a first direction by applying a first carrier (first carrier in annotated Fig. 1 below) which is movable in the first direction and which is capable of retaining the sheet by means of a

Art Unit: 3653

surface force (e.g., friction), wherein a retainer area (area retained by first carrier in annotated Fig. 1 below) of the sheet is retained by the first carrier (first carrier in annotated Fig. 1 below) and a conveyance area (conveyance area in annotated Fig. 1 below) of the sheet projects with respect to the first carrier (first carrier in annotated Fig. 1 below);

conveying the sheet from the first carrier (first carrier in annotated Fig. 1 below) to a second carrier (second carrier in annotated Fig. 1 below) which is movable in a second direction and which is capable of retaining the sheet by means of a surface force (e.g., friction), wherein the sheet is put in a conveyance position (conveyance position in annotated Fig. 1 below) by the first carrier (first carrier in annotated Fig. 1 below), in which position the complete conveyance area overlaps the second carrier (second carrier in annotated Fig. 1 below); and

moving the sheet in the second direction by applying the second carrier (second carrier in annotated Fig. 1 below); wherein, continuously during the movement of the sheet in the first direction through to the conveyance position (conveyance position in annotated Fig. 1 below), guidance of a guidance area (area of sheet contacted by guiding means in annotated Fig. 1 below) of the sheet, which comprises at least a portion of the conveyance area (conveyance area in annotated Fig. 1 below) of the sheet, takes place by applying guiding means (guiding means in annotated Fig. 1 below), which guidance is cancelled only when the sheet has reached the conveyance position (conveyance position in annotated Fig. 1 below). **As shown in annotated Fig. 1 below, the “first carrier” includes the three right-most belts (15, 15 and 15) and**

Art Unit: 3653

**the “guiding means” includes the one left-most belt (15). The retainer area is the area supported across the width of the first carrier. The conveyance area is the area of the sheet that projects to the left of the width of the first carrier. The guidance area is the area of the sheet that is supported across the width of the guiding means.**

Regarding the recitation “which guidance is cancelled only when the sheet has reached the conveyance position” in claim 1, Figs. 3 and 4 of Baker show that the second carrier (second carrier in annotated Fig. 1 below) has two different positions. Namely, (1) a solid-line “raised position” in Fig. 3, which lifts a sheet off of the first carrier as well as the guidance means of Baker, and (2) a dotted-line “lowered position” in Fig. 3, which allows the sheet to continue to be conveyed by the first carrier of Baker and pass over the second carrier of Baker. Fig. 4 of Baker also shows the “raised position” of the second carrier. In this raised position, rollers on the second carrier lift an object completely off of the guiding means (i.e., the left-most belt (15) in Fig. 1 of Baker). By raising the sheet off of the guiding means when the object is at the conveyance position shown in Fig. 1 of Baker, guidance of such guiding means is canceled, as claimed. In other words, when the sheet is located at the conveyance position shown in Fig. 1 of Baker, guidance by the guidance means of Baker is canceled. Thus, all of the limitations of claim 24 are met. However, if it is somehow thought that the Baker apparatus does not operate in this manner, it also would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the Baker apparatus with a second carrier that includes pop-up rollers that lift an

Art Unit: 3653

object off of all of the belts of Baker (i.e., the belts of the first carrier and the belts of the guidance means of Baker) for the purpose of ensuring that such objects are diverted off and away from the first carrier of Baker, as taught by Evans. See, e.g., the first carrier (104 and 106) of Evans, the second carrier (110b and 124b) of Evans and the disclosure of how these elements operate in Fig. 1 column 4, lines 6-14 of Evans.

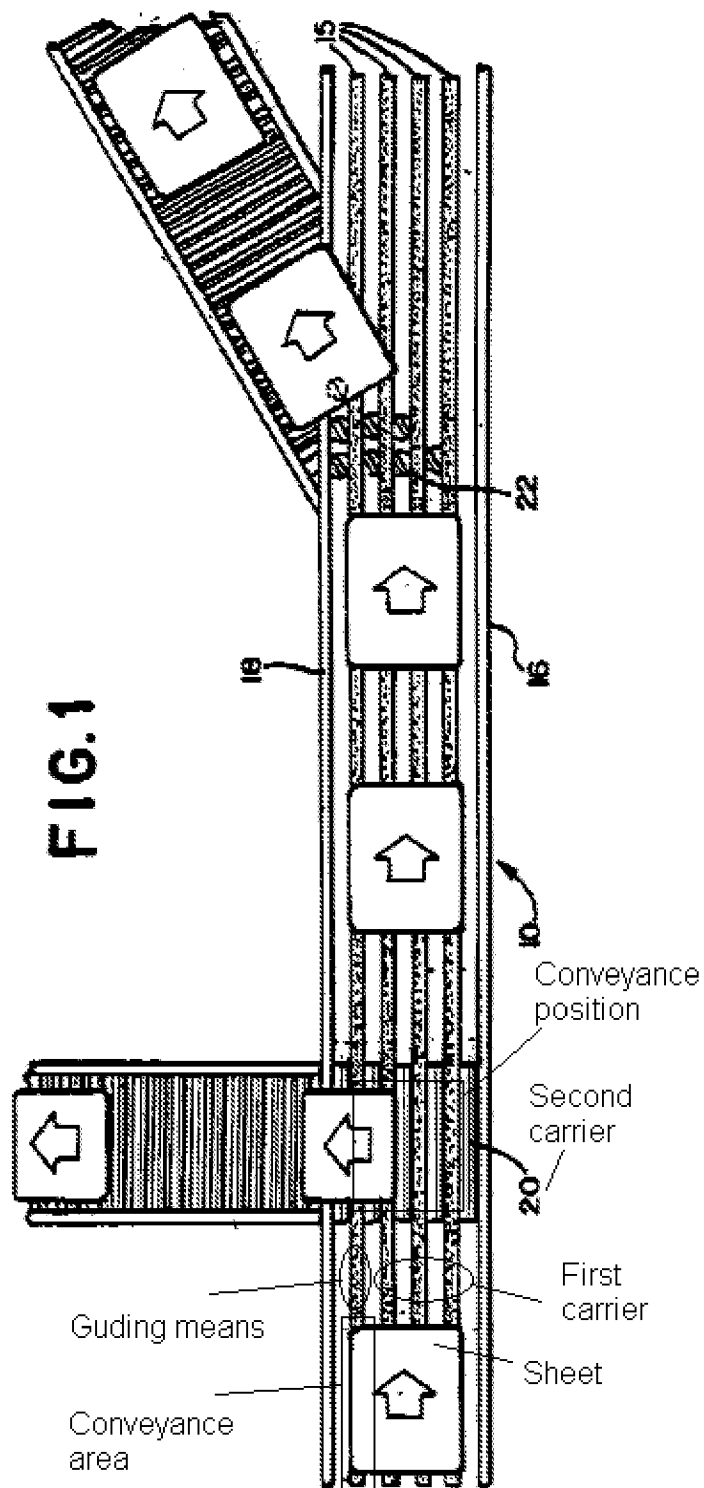
Regarding claim 25, Figs. 1-16b of Baker disclose that the guiding means (guiding means in annotated Fig. 1 below) are capable of retaining the guidance area of the sheet (unnumbered sheet in annotated Fig. 1 below) by means of a surface force.

Regarding claim 26, Figs. 1-16b of Baker disclose that the guiding means (guiding means in annotated Fig. 1 below) are adapted to guaranteeing that the guidance area of the sheet and the retainer area of the sheet extend at a substantially equal level.

Regarding claim 27, Figs. 1-16b of Baker disclose that the guiding means (guiding means in annotated Fig. 1 below) are movable in the first direction.

Regarding claim 28, Figs. 1-16b of Baker disclose that, during the time that guidance of the guidance area of the sheet takes place, a speed at which the guiding means (guiding means in annotated Fig. 1 below) are moved is substantially equal to a speed at which the first carrier (first carrier in annotated Fig. 1 below) is moved.

Regarding claim 30, Figs. 1-16b of Baker disclose that the guidance area comprises a portion of the conveyance area of the sheet, which is a front portion in the direction.



3. Claims 31-33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of U.S. Patent No. 5,188,010 (Borchardt et al.).

Regarding claim 31 Figs. 1-16b of Baker show a device for transporting a sheet comprising:

a movable first carrier (first carrier in annotated Fig. 1 above) which is adapted to moving sheets (unnumbered sheets in annotated Fig. 1 above) in a first direction and retaining sheets by means of a surface force (e.g., friction);

a movable second carrier (second carrier in annotated Fig. 1 above) which is adapted to moving sheets in a second direction and retaining sheets by means of surface force (e.g., friction), wherein the first carrier (first carrier in annotated Fig. 1 above) and the second carrier (second carrier in annotated Fig. 1 above) adjoin each other in a close-fitting fashion at the location of a conveyance region (conveyance position in annotated Fig. 1 above); and

guiding means (guiding means in annotated Fig. 1 above) for guiding a portion of sheets which are retained by the first carrier (first carrier in annotated Fig. 1 above), as far as in the conveyance region (conveyance position in annotated Fig. 1 above),

wherein the guiding means (guiding means in annotated Fig. 1 above) are movable in the first direction and comprise an endless conveyor belt (left-most conveyor belt in annotated Fig. 1 above), and

wherein the conveyor belt (left-most belt 15 annotated Fig. 1 above) comprises at least two different types of areas (e.g., area of a first segment of the belt, area of a second segment of the belt spaced away from the first segment along the direction that



Art Unit: 3653

the belt extends lengthwise, etc.). Any two segments of the belt can be considered two different types of areas of the belt. However, Baker does not explicitly disclose that at the location of one type of area a dimension of the conveyor belt (left-most belt 15 in annotated Fig. 1 above) in a transverse direction (width) is different than at the location of another type of area, as claimed.

Borchardt discloses that it is well known in the art that belts are made with tolerances in the width dimensions of such belts and outlines methods for minimizing such width tolerances. See, e.g., Abstract, col. 2, lines 3-6 and col. 4, lines 17-25. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Baker with a belt that has some degree of width tolerance at different segments (i.e., different types of areas of the belt) such that at the location of one type of area a dimension of the conveyor belt of Baker in a transverse direction (width) is different than at the location of another type of area, because width tolerance of belts is common in the art, as taught by Borchardt. Thus, all of the limitations of claim 31 are met by the cited combination of references.

Regarding claim 32, as best understood, Figs. 1-16b of Baker show that the guiding means (guiding means in annotated Fig. 1 above) are adapted to retaining sheets by means of a surface force (e.g., friction).

Regarding claim 33, as best understood, Figs. 1-16b of Baker show that contacting areas of the first carrier (first carrier in annotated Fig. 1 above) and contacting areas of the guiding means (guiding means in annotated Fig. 1 above),

Art Unit: 3653

which are adapted to contacting the sheets, are located on a substantially equal level.

See, e.g., Fig. 4 of Baker.

4. Claim 37, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Borchardt as applied to claim 31 above, and further in view of U.S. Patent No. 5,282,528 (Hudson). Regarding claim 37, as best understood, Figs. 1-16b of Baker show a frame (16 or 18) for receiving a reel having a web which is destined to receive the sheets and to be connected to the sheets, but does not explicitly disclose a gluing device, as claimed. With regard to the recitation “a frame **for receiving a reel having a web which is destined to receive the sheets and to be connected to the sheets**” in claim 37, the bolded portion of this recitation is merely a statement of intended use that does not distinguish claim 37 from the prior art apparatus of Baker in view of Borchardt. Likewise, in the recitation “a gluing device **for applying glue to the web**”, the bolded portion of the recitation is merely a statement of intended use that does not distinguish claim 37 from the prior art apparatus of Baker in view of Borchardt. Baker discloses an apparatus that changes the direction that flat objects move using conveyors that divert such objects in different directions.

Similarly, Hudson discloses that it is well known in the art to utilize conveyors that divert objects in different directions in gluing machines. See, e.g., Fig. 1 and col. 2, line 52 of Hudson. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the conveyor arrangement of Baker in view of Borchardt in a gluing device, because Hudson discloses that it is common in the art to

utilize similar direction changing arrangements in gluing devices. Thus, all of the limitations of claim 37 are met by the cited combination of references.

### ***Response to Arguments***

5. Applicant argues with regard to the Baker reference that “the guiding means are ***always*** present in the conveyance position, wherein there is no way that the guidance is cancelled at some point. As a result, the guiding means are in the way in the conveyance position, and hinder direct contact between the conveyance area of the sheet and the second carrier and that position.”

The examiner disagrees. Regarding the recitation “which guidance is cancelled only when the sheet has reached the conveyance position” in claim 1, Figs. 3 and 4 of Baker show that the second carrier (second carrier in annotated Fig. 1 of Baker) has two different positions. Namely, (1) a solid-line “raised position” in Fig. 3, which lifts a sheet off of the first carrier as well as the guidance means of Baker, and (2) a dotted-line “lowered position” in Fig. 3, which allows the sheet to continue to be conveyed by the first carrier of Baker and pass over the second carrier of Baker. Fig. 4 of Baker also shows the “raised position” of the second carrier. In this raised position, rollers on the second carrier lift an object completely off of the guiding means (i.e., the left-most belt (15) in Fig. 1 of Baker). By raising the sheet off of the guiding means when the object is at the conveyance position shown in Fig. 1 of Baker, guidance of such guiding means is canceled, as claimed. In other words, when the sheet is located at the conveyance position shown in Fig. 1 of Baker, guidance by the guidance means of Baker is canceled. Thus, all of the limitations of claim 24 are met. However, if it is somehow thought that

Art Unit: 3653

the Baker apparatus does not operate in this manner, it also would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the Baker apparatus with a second carrier that includes pop-up rollers that lift an object off of all of the belts of Baker (i.e., the belts of the first carrier and the belts of the guidance means of Baker) for the purpose of ensuring that such objects are diverted off and away from the first carrier of Baker, as taught by Evans. See, e.g., the first carrier (104 and 106) of Evans, the second carrier (110b and 124b) of Evans and the disclosure of how these elements operate in Fig. 1 column 4, lines 6-14 of Evans.

Next, applicant argues

Claim 31 is herein amended with the subject matter of Claims 34-36, now canceled, and is novel and non-obvious in view of the cited art. The Examiner rejects Claim 31 (previously Claim 36) in view of the combination of Baker and Borchardt et al. It is noted that a dimension in a transverse direction is normally denoted as the width, and the Examiner suggests that Baker discloses the variations in width as recited by Claim 31. This is respectfully traversed, as it cannot be seen where variations in the width of the left-most belt 15 of Baker is shown.

It may be so that it is known to make belts with tolerances in the width dimensions of such belts, but this is inapposite for rejection of Claim 31. Claim 31 specifically recites two types of areas, which are different as far as their width dimensions are concerned.

This feature is clearly supported by the figures of the present application, and not disclosed in the cited prior art. Discerning types of areas in a belt has nothing to do with the normal phenomenon of width tolerance, but has to do with dimensions on a higher level, i.e. defined dimensions for each of the types. Hence, knowledge of width tolerances would not lead to the insight that it is possible to make two types of areas in the belt. It is further remote to suggest that one of skill in the art would realize the desired cancellation of the guidance on the basis of a difference of the width of the areas.

It is respectfully submitted that Claim 31 is non-obvious over the combination of Baker and Borchardt et al. The prior art does not teach the presence of two types of width areas in a belt for guiding a portion of a sheet, let alone the associated possibility of realizing a cancellation of guidance of the sheet portion and an immediate conveyance from one

Art Unit: 3653

carrier to another, in order for the sheet portion to always be retained so that there is no risk of curling of the sheet portion.

The examiner disagrees. The Baker patent is relied upon to show a belt. Moreover, the examiner takes the position that any two different segments of the left-most belt 15 of Baker (the guidance means) can be considered to have two different types of areas of this belt. For example, one small segment of the belt near element 22 has a front cross-sectional surface area, while a different small segment of the belt upstream has a middle cross-sectional surface area. The first segment has one type of area, while the second segment has a different type of area, as claimed. The terms "type of area" is very broad. In as much as Fig. 4 of the instant application shows different segments of the belt that have different types of areas, so does Fig. 1 of Baker. Different segments of the belt of Baker can be considered to have different "types of areas", as claimed. Applicant needs to further define "types of areas" to distinguish the belt of the instant application from that of the left-most belt (15) in Fig. 1 of Baker. Baker is not relied upon to provide a teaching for different dimensions of the conveyor belt in a transverse direction. Rather, the Borchardt patent is relied upon for this teaching.

Borchardt discloses that it is well known in the art that belts are made with tolerances in the width dimensions of such belts and outlines methods for minimizing such width tolerances. See, e.g., Abstract, col. 2, lines 3-6 and col. 4, lines 17-25. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Baker with a belt that has some degree

Art Unit: 3653

of width tolerance at different segments (i.e., different types of areas of the belt) such that at the location of one type of area a dimension of the conveyor belt of Baker in a transverse direction (width) is different than at the location of another type of area, because width tolerance of belts is common in the art, as taught by Borchardt. Thus, all of the limitations of claim 31 are met by the cited combination of references.

The examiner can pick any two segments of the belt with different widths and meet the limitations of claim 31. Borchardt discloses that width varies along belts. Thus, any two segments of the belt with different widths can be considered to be different types of areas of such belt with different transverse dimensions, as claimed.

#### ***Allowable Subject Matter***

6. Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS A. MORRISON whose telephone number is (571)272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stefanos Karmis can be reached on (571) 272-6744. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3653

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/13/2010

/Stefano Karmis/  
Supervisory Patent Examiner, Art Unit 3653